

WEST[Generate Collection](#)**Search Results - Record(s) 1 through 3 of 3 returned.**☒ 1. Document ID: US 5985043 A

L2: Entry 1 of 3

File: USPT

Nov 16, 1999

US-PAT-NO: 5985043

DOCUMENT-IDENTIFIER: US 5985043 A

TITLE: Polymerizable fluxing agents and fluxing adhesive compositions therefrom

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|------|-------|----------|-------|--------|----------------|------|-----------|--------|-----|-----------|-------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KMC | Draw Desc | Image |
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☐ 2. Document ID: US 4581461 A

L2: Entry 2 of 3

File: USPT

Apr 8, 1986

US-PAT-NO: 4581461

DOCUMENT-IDENTIFIER: US 4581461 A

TITLE: Maleated siloxane derivatives

| | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|-----|-----------|-------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KMC | Draw Desc | Image |
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☐ 3. Document ID: EP 969065 A2

L2: Entry 3 of 3

File: DWPI

Jan 5, 2000

DERWENT-ACC-NO: 2000-089301

DERWENT-WEEK: 200008

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TITLE: Curable adhesive composition for bonding electronic component to a substrate

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|------|-------|----------|-------|--------|----------------|------|-----------|--------|-----|-----------|----------|-------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KMC | Draw Desc | Clip Img | Image |
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L2: Entry 2 of 3

File: USPT

Apr 8, 1986

DOCUMENT-IDENTIFIER: US 4581461 A

TITLE: Maleated siloxane derivatives

BSPR:

Curable adhesive and sealant compositions employing maleimide derivatives are well known in the art. For example, U.S. Pat. No. ~~3,988,299~~ (issued Oct. 26, 1976 to B. M. Malofsky) describes the use of small amounts of maleimide derivatives with unsaturated diacrylates in both heat curable and anaerobic curable adhesive compositions. U.S. Pat. No. ~~4,370,467~~ (issued Jan. 25, 1983 to M. Gaku et al.) describes the use of maleimides with polyfunctional aromatic cyanate esters in the preparation of curable resin compositions.

09/091, 492

0091492

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L6: Entry 1 of 10

File: USPT

Nov 16, 1999

DOCUMENT-IDENTIFIER: US 5985043 A

TITLE: Polymerizable fluxing agents and fluxing adhesive compositions therefrom

DEPR:

4. Resins. The thermally curable adhesive composition does not require resins; further, compositions that do not include resins tend to have longer pot lives and lower viscosities during solder reflow. However, as an option, a resin can be employed and it functions to increase the adhesion of the cured composition to the substrate and to increase the cohesive strength and glass transition temperature of the cured composition. The resin may be any suitable resin that is compatible (i.e., blendable) with the fluxing agent. By blendable is meant that the resins do not have to be chemically bonded to the fluxing agent and/or diluent, however, preferred resins can crosslink with the carboxylic acid groups in the fluxing agent or by other reactive moieties, such as optional -OH groups, in the diluent. Resins which meet these requirements include, but are not limited to, epoxies, phenolics, novalacs (both phenolic and cresolic), polyurethanes, polyimides, bismaleimides, maleimides, cyanate esters, polyvinyl alcohols, polyesters, and polyureas. Preferred resins

1,4-cyclohexanedimethanol diglycidyl ether,
3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate,
N,N-diglycidyl-4-glycidyl-oxyaniline, bisphenol A based epoxy resins, and mixtures thereof. These are commercially available.

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L6: Entry 3 of 10

File: USPT

Dec 12, 1989

DOCUMENT-IDENTIFIER: US 4886842 A

TITLE: Epoxy-amine compositions employing unsaturated imides

BSPR:

While the use of maleimide or nadimide functional compounds as additives to improve hot strength various curable adhesive or related systems has been previously described, applicants are unaware of any prior art suggesting that such additives can result in improved adhesion or thermal cycle resistance (i.e. resistance to loss of adhesion as a result of repeated large temperature changes.)

WEST

Generate Collection

L6: Entry 3 of 10

File: USPT

Dec 12, 1989

US-PAT-NO: 4886842

DOCUMENT-IDENTIFIER: US 4886842 A

TITLE: Epoxy-amine compositions employing unsaturated imides

DATE-ISSUED: December 12, 1989

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------------------|-----------------|-------|----------|---------|
| Drain; Kieran F. | Rochester Hills | MI | N/A | N/A |
| Kadziela; Kris | East Hartford | CT | N/A | N/A |

ASSIGNEE INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|---------------------|-----------|-------|----------|---------|-----------|
| Loctite Corporation | Newington | CT | N/A | N/A | 02 |

APPL-NO: 7/ 295068

DATE FILED: January 6, 1989

PARENT-CASE:

This is a divisional of co-pending application Ser. No.
07/164,075 filed on Mar. 4, 1988 now U.S. Pat. No. 4,837,295.

INT-CL: [4] C08G 59/60

US-CL-ISSUED: 522/103; 522/107, 522/167

US-CL-CURRENT: 522/103; 522/107, 522/167

FIELD-OF-SEARCH: 522/107, 522/167, 522/103

REF-CITED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------------------------|----------------|------------------|------------|
| <input type="checkbox"/> 2895950 | July 1959 | Kriebble | 260/89.5 |
| <input type="checkbox"/> 3218305 | November 1965 | Kriebble | 260/89.5 |
| <input type="checkbox"/> 3425988 | February 1969 | Gorman et al. | 260/47 |
| <input type="checkbox"/> 3763087 | October 1973 | Holub et al. | 260/41 |
| <input type="checkbox"/> 3985928 | October 1976 | Watanabe et al. | 428/273 |
| <input type="checkbox"/> 3988299 | October 1976 | Malofsky | 260/27 |
| <input type="checkbox"/> 4025407 | May 1977 | Chang et al. | 204/159.14 |
| <input type="checkbox"/> 4051195 | September 1977 | McWhorter | 260/837 |
| <input type="checkbox"/> 4092442 | May 1978 | Agnihotri et al. | 427/41 |
| <input type="checkbox"/> 4092443 | May 1978 | Green | 522/167 X |
| <input type="checkbox"/> 4110188 | August 1978 | Darms et al. | 204/159 |
| <input type="checkbox"/> 4365068 | December 1982 | Darms et al. | 548/435 |
| <input type="checkbox"/> 4416975 | November 1983 | Green et al. | 522/167 X |
| <input type="checkbox"/> 4485229 | November 1984 | Waddill et al. | 528/111 |
| <input type="checkbox"/> 4490515 | December 1984 | Mariotti et al. | 526/298 |

ART-UNIT: 153

PRIMARY-EXAMINER: Nielsen; Earl

ATTY-AGENT-FIRM: Vidas & Arrett

ABSTRACT:

The present invention comprises a radiation immobilizable epoxy formulation which displays improved initial and thermal cycle strengths when bonding different materials such as terephthalate polyesters and aluminum.

The composition comprises:

- (1) a compound or mixture of compounds having a plurality of epoxy groups per molecule;
- (2) a polyoxyalkylene amine curative for the epoxy;
- (3) an imide compound selected from those having the formulas; and ##STR1## (4) a photocurable ethylenically unsaturated compound and photoinitiator, said ethylenically unsaturated compound and photoinitiator present in amounts which together are effective to cause the composition to become immobilized when irradiated with actinic radiation.

10 Claims, 0 Drawing figures

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| Term | Documents |
|---|-----------|
| MALEIMIDE.DWPI,EPAB,JPAB,USPT. | 15557 |
| MALEIMIDES.DWPI,EPAB,JPAB,USPT. | 3029 |
| (4 SAME MALEIMIDE).USPT,JPAB,EPAB,DWPI. | 10 |

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EPO Abstracts Database

Derwent World Patents Index

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IBM Technical Disclosure Bulletins

14 same maleimide

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Today's Date: 8/2/2000

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|---------------------|------------------------------------|------------------|-----------------|
| USPT,JPAB,EPAB,DWPI | 14 same maleimide | 10 | <u>L6</u> |
| USPT,JPAB,EPAB,DWPI | 14 same (maleimide with initiator) | 2 | <u>L5</u> |
| USPT,JPAB,EPAB,DWPI | curable adhesive | 3770 | <u>L4</u> |
| USPT,JPAB,EPAB,DWPI | 11 and (maleimide with initiator) | 1 | <u>L3</u> |
| USPT,JPAB,EPAB,DWPI | 11 same maleimide | 3 | <u>L2</u> |
| USPT,JPAB,EPAB,DWPI | curable adhesive composition | 585 | <u>L1</u> |

| Term | Documents |
|---|-----------|
| MALEIMIDE.DWPI,EPAB,JPAB,USPT. | 15557 |
| MALEIMIDES.DWPI,EPAB,JPAB,USPT. | 3029 |
| (1 SAME MALEIMIDE).USPT,JPAB,EPAB,DWPI. | 3 |

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L6: Entry 1 of 10

File: USPT

Nov 16, 1999

US-PAT-NO: 5985043

DOCUMENT-IDENTIFIER: US 5985043 A

TITLE: Polymerizable fluxing agents and fluxing adhesive compositions therefrom

| | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☐ 2. Document ID: US 4923997 A

L6: Entry 2 of 10

File: USPT

May 8, 1990

US-PAT-NO: 4923997

DOCUMENT-IDENTIFIER: US 4923997 A

TITLE: Novel siloxane maleimides

| | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☒ 3. Document ID: US 4886842 A

L6: Entry 3 of 10

File: USPT

Dec 12, 1989

US-PAT-NO: 4886842

DOCUMENT-IDENTIFIER: US 4886842 A

TITLE: Epoxy-amine compositions employing unsaturated imides

| | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☐ 4. Document ID: US 4837295 A

L6: Entry 4 of 10

File: USPT

Jun 6, 1989

US-PAT-NO: 4837295

DOCUMENT-IDENTIFIER: US 4837295 A

TITLE: Epoxy-amine compositions employing unsaturated imides

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☐ 5. Document ID: US 4806608 A

L6: Entry 5 of 10

File: USPT

Feb 21, 1989

US-PAT-NO: 4806608

DOCUMENT-IDENTIFIER: US 4806608 A

TITLE: Curable siloxane maleimide composition

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☐ 6. Document ID: US 4581461 A

L6: Entry 6 of 10

File: USPT

Apr 8, 1986

US-PAT-NO: 4581461

DOCUMENT-IDENTIFIER: US 4581461 A

TITLE: Maleated siloxane derivatives

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☐ 7. Document ID: JP 2000044888 A

L6: Entry 7 of 10

File: JPAB

Feb 15, 2000

PUB-NO: JP02000044888A

DOCUMENT-IDENTIFIER: JP 2000044888 A

TITLE: DIE-BONDING ADHESIVE

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☐ 8. Document ID: JP 11172206 A

L6: Entry 8 of 10

File: JPAB

Jun 29, 1999

PUB-NO: JP411172206A

DOCUMENT-IDENTIFIER: JP 11172206 A

TITLE: HEAT CURABLE ADHESIVE TAPE

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|

☐ 9. Document ID: EP 969065 A2

L6: Entry 9 of 10

File: DWPI

Jan 5, 2000

DERWENT-ACC-NO: 2000-089301

DERWENT-WEEK: 200008

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TITLE: Curable adhesive composition for bonding electronic component to a substrate

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Clip Img | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|----------|-------|
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|----------|-------|

☐ 10. Document ID: JP 10036789 A

L6: Entry 10 of 10

File: DWPI

Feb 10, 1998

DERWENT-ACC-NO: 1998-175227

DERWENT-WEEK: 199816

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TITLE: Heat curable adhesive tape - comprises resin composition containing soluble pre-polymer obtained by reacting bis- or higher maleimide and di- or higher amino compound, crosslinking agent and synthetic rubber

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |
|------|-------|----------|-------|--------|----------------|------|-----------|--------|------|-----------|-------|
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| (4 SAME MALEIMIDE).USPT,JPAB,EPAB,DWPI. | 10 |

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